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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/826,594 | 04/05/2001 | Dieter Kantz | GR 00 P 1679 | 4825 |

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EXAMINER

KARLSEN, ERNEST F

ART UNIT

PAPER NUMBER

2829

DATE MAILED: 12/02/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 09/826,594 | KANTZ ET AL. | |
| | Examiner | Art Unit | |
| | Ernest F. Karlsen | 2829 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 25 August 2003.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1 and 7-31 is/are pending in the application.
- 4a) Of the above claim(s) 1 and 8-19 is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 7 and 20-31 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) The translation of the foreign language provisional application has been received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) Paper No(s). _____.
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) Notice of Informal Patent Application (PTO-152)
3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 1003. 6) Other: _____

Claims 1 and 8-19 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected inventions and or/species, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in Paper No. 0503.

Claims 7 and 20-31 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The exact meaning of the word "areally" is still not clear. In the previous Office Action the Examiner requested an exact definition but no definition was provided. The source of the exact definition should also be provided. It is still not clear what the composition of the radiation-absorbing material is so one wishing to make and use the apparatus would be left to hunt for a suitable material. This rejection was previously made and Applicants responded that one skilled in the art would know what material to use. Such explanation is not acceptable.

Claims 7 and 20-31 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. A semiconductor wafer having IC elements formed on or in the wafer is like a piece of plastic with coins embedded in the plastic not like a piece of plastic with coins laying on top of the piece of plastic. Claim 20, lines 2-6

read like the analogy of coins on top of a piece of plastic and it is noted that Figure 5A corresponds to claim 20. It is not clear from where support for claim 20 is drawn.

Exactly what is shown in Figure 5A is not clear. The word "areally" does not appear in the specification specifically with respect to Figure 5A. The specification states that a the solar cell is disposed over the whole area on the surface of the semiconductor wafer 10. The specification says "on the surface" of the semiconductor wafer. This is presumably under the chips. The use of the word "areally" in claim 20 is considered to be without proper support. This rejection was made previously and Applicants responded, in effect, that the chips are like coins placed on the sheet of plastic. Applicants have no disclosure for such structure and such structure is contrary to normal "wafer with chips" structure.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 20, 23 and 27 are rejected under 35 U.S.C. 102(e) as being fully anticipated by Cook et al. Cook et al at column 4, lines 57-63 indicate they position the solar cell in the kerf for supplying power to the chips. The wafer of Cook et al has an area with a plurality of chips form in the area and each of the chips has a self-test unit generating test information for functionally testing the chip. See columns 3 and 4 of

Cook et al where it is indicated that power from a light responsive diode device powers a ring oscillator on a chip to determine a property of the chip. Characteristics of the chip modulate the output of the ring oscillator which causes a radio frequency signal to be radiated and sensed by an external device which analyzes the signal to determine properties of the chip. In Cook et al a light is positioned adjacent to the diodes and is thus an energy source that is above the semiconductor wafer and the diodes are connected to a chip or chips. The diodes form a solar cell that generates operating energy for the ring oscillator on each chip. The diodes that form a solar cell are disposed, "areally" or otherwise, over the semiconductor chips. Note that the words "above" and "over" used in the last 8 lines of claim 20 are terms normally related to orientation in the gravitational field of the planet Earth. If the wafer of Cook et al is orientated so that its flat surface is parallel to the surface of Earth, then the diodes would be alongside of a chip or chips. Turn the wafer 90 degrees so that its flat plane is perpendicular to the surface of Earth and the diodes might be below, above or along side the chip or chips. Above, below and along side of are considered equivalent terms in the context of the claims. Cook et al transmits data via the modulated and radiated rf signal from the ring oscillator thus meeting the limitation added by claim 23. The chips of Cook et al are powered by separate diodes and are thus decoupled from each other as per the limitation added by claim 27.

This application contains claims 1 and 8-19 drawn to an invention nonelected with traverse in Paper No. 0503. A complete reply to the final rejection must include

cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication should be directed to Ernest F. Karlsen at telephone number 703-305-4768.

Ernest F. Karlsen

November 28, 2003



ERNEST KARLSEN
PRIMARY EXAMINER